

WHAT IS CLAIMED IS:

1. A method comprising:

5 accessing a first space, wherein the first space comprises a first network-addressable storage location, wherein information usable to access the first space is provided in an advertisement for the first space, wherein the advertisement for the first space comprises a first schema, and wherein the first schema specifies one or more messages usable to invoke functions of
10 the first space;

a requesting client requesting creation of a second space by sending to the first space one of the messages specified by the first schema;

15 creating the second space in response to the requesting client requesting creation of the second space, wherein the second space is initially configured to permit access only to the requesting client, wherein the second space comprises a second network-addressable storage location, wherein information usable to access the second space is provided in an advertisement for the second space, wherein the advertisement for the second space comprises a second schema, and wherein the second schema specifies one or more messages usable to invoke functions of the second space; and

25 the requesting client accessing the second space by sending to the second space one of the messages specified by the second schema.

2. The method of claim 1, further comprising:

30 creating a root authentication token for the second space;

initializing an authentication service associated with the second space, whereby the second space is configured to permit access only to a client holding the root authentication token; and

5 sending the root authentication token to the requesting client.

3. The method of claim 2, further comprising:

the requesting client sending the root authentication token to a second client; and

10 the second client accessing the second space by sending to the second space one of the messages specified by the second schema.

4. The method of claim 1, further comprising:

15 the requesting client modifying a security policy of the second space, whereby the second space is configured to permit access to a second client.

5. The method of claim 4, further comprising:

20 the second client reading a service advertisement from the second space, wherein the service advertisement comprises information usable to execute a corresponding service.

25 6. The method of claim 1,

wherein the accessing the first space comprises sending information to the first space at a first Uniform Resource Identifier (URI); and

30 wherein the requesting client accessing the second space comprises the requesting client sending information to the second space at a second URI.

7. The method of claim 1,

wherein the first schema is expressed in a data representation language; and

5

wherein the second schema is expressed in the data representation language.

8. The method of claim 7,

10 wherein the data representation language comprises eXtensible Markup Language
(XML).

9. The method of claim 1, further comprising:

15 reading a service advertisement stored in the first space, wherein the service
advertisement comprises information which is usable to access and
execute a second service;

20 using the information in the service advertisement to execute the second service;

generating a set of results of the second service in response to the executing the
second service; and

25 publishing the set of results of the second service in the second space;

wherein the requesting creation of the second space comprises requesting creation
of the second space for storage of the set of results of the service.

10. The method of claim 1,

30

wherein the accessing the first space comprises accessing the first space at a first address to a storage facility;

5 wherein the creating the second space comprises creating a second address to the storage facility; and

wherein the accessing the second space comprises accessing the second space at the second address to the storage facility.

10 11. The method of claim 1,

wherein the functions of the first space comprise storing information in the first space and reading information from the first space; and

15 wherein the functions of the second space comprise storing information in the second space and reading information from the second space.

12. A system comprising:

20 a first client;

25 a first space which is communicatively coupled to the client, wherein the first space comprises a first network-addressable storage location, wherein information usable to access the first space is provided in an advertisement for the first space, wherein the advertisement for the first space comprises a first schema, and wherein the first schema specifies one or more messages usable to invoke functions of the first space;

wherein the first client is operable to:

30 access the first space;

0
0
0
0
0
0
0
0
0
0
0
0
0
0
0

request creation of a second space by sending to the first space one of the
messages specified by the first schema, wherein the second space
is initially configured to permit access only to the first client,
5 wherein the second space comprises a second network-addressable
storage location, wherein information usable to access the second
space is provided in an advertisement for the second space,
wherein the advertisement for the second space comprises a second
schema, and wherein the second schema specifies one or more
10 messages usable to invoke functions of the second space; and

access the second space by sending to the second space one of the
messages specified by the second schema.

15 13. The system of claim 12,

wherein the second space is configured to permit access only to a client holding a
root authentication token; and

20 wherein the second space is operable to send the root authentication token to the
first client.

14. The system of claim 13, further comprising:

25 a second client which is communicatively coupled to the first client and the
second space;

wherein the first client is operable to send the root authentication token to the
second client; and

30

wherein the second client is operable to access the second space by sending to the second space one of the messages specified by the second schema.

15. The system of claim 12, further comprising:

5

a second client which is communicatively coupled to the first client and the second space;

10 wherein the first client is operable to modify a security policy of the second space, whereby the second space is configured to permit access to the second client.

16. The system of claim 15,

15 wherein the second client is operable to read a service advertisement from the second space, wherein the service advertisement comprises information usable to execute a corresponding service.

17. The system of claim 12,

20

wherein in accessing the first space, the first client is operable to send information to the first space at a first URI; and

25 wherein in accessing the second space, the first client is operable to send information to the second space at a second URI.

18. The system of claim 12,

30 wherein the first schema is expressed in a data representation language; and

wherein the second schema is expressed in the data representation language.

19. The system of claim 18,

wherein the data representation language comprises eXtensible Markup Language
5 (XML).

20. The system of claim 12, further comprising:

a service which is communicatively coupled to the first client and to the first
10 space;

wherein the first client is operable to read a service advertisement stored in the
15 first space, wherein the service advertisement comprises information
which is usable to access and execute the service;

wherein the service is operable to:

generate a set of results of executing the service;

20 create the second space; and

publish the set of results in the second space.

21. The system of claim 12,

25 wherein in accessing the first space, the first client is operable to access the first
space at a first address to a storage facility;

30 wherein in requesting creation of the second space, the first client is operable to
request creation of a second address to the storage facility; and

wherein in accessing the second space, the first client is operable to access the second space at the second address to the storage facility.

22. The system of claim 12,

5

wherein the functions of the first space comprise storing information in the first space and reading information from the first space; and

wherein the functions of the second space comprise storing information in the
10 second space and reading information from the second space.

23. A carrier medium comprising program instructions which are computer-executable to implement:

15 accessing a first space, wherein the first space comprises a first network-
addressable storage location, wherein information usable to access the first
space is provided in an advertisement for the first space, wherein the
advertisement for the first space comprises a first schema, and wherein the
first schema specifies one or more messages usable to invoke functions of
the first space;

20

a requesting client requesting creation of a second space by sending to the first space one of the messages specified by the first schema;

25 creating the second space in response to the requesting client requesting creation
of the second space, wherein the second space is initially configured to
permit access only to the requesting client, wherein the second space
comprises a second network-addressable storage location, wherein
information usable to access the second space is provided in an
advertisement for the second space, wherein the advertisement for the
30 second space comprises a second schema, and wherein the second schema

0
2
6
5
3
8
1
0
0
0
0
0
0

specifies one or more messages usable to invoke functions of the second space; and

the requesting client accessing the second space by sending to the second space
5 one of the messages specified by the second schema.

24. The carrier medium of claim 23, wherein the program instructions are further computer-executable to implement:

10 creating a root authentication token for the second space;

initializing an authentication service associated with the second space, whereby
the second space is configured to permit access only to a client holding the
root authentication token; and

15 sending the root authentication token to the requesting client.

25. The carrier medium of claim 24, wherein the program instructions are further computer-executable to implement:

20 the requesting client sending the root authentication token to a second client; and

the second client accessing the second space by sending to the second space one
of the messages specified by the second schema.

25
26. The carrier medium of claim 23, wherein the program instructions are further computer-executable to implement:

30 the requesting client modifying a security policy of the second space, whereby the
second space is configured to permit access to a second client.

27. The carrier medium of claim 26, wherein the program instructions are further computer-executable to implement:

5 the second client reading a service advertisement from the second space, wherein
 the service advertisement comprises information usable to execute a
 corresponding service.

28. The carrier medium of claim 23,

10 wherein in the accessing the first space, the program instructions are further
 computer-executable to implement sending information to the first space
 at a first URI; and

15 wherein in the requesting client accessing the second space, the program
 instructions are further computer-executable to implement the requesting
 client sending information to the second space at a second URI.

29. The carrier medium of claim 23,

20 wherein the first schema is expressed in a data representation language; and
 wherein the second schema is expressed in the data representation language.

30. The carrier medium of claim 29,

25 wherein the data representation language comprises eXtensible Markup Language
 (XML).

31. The carrier medium of claim 23, wherein the program instructions are further
30 computer-executable to implement:

reading a service advertisement stored in the first space, wherein the service advertisement comprises information which is usable to access and execute a second service;

5 using the information in the service advertisement to execute the second service;

generating a set of results of the second service in response to the executing the second service; and

10 publishing the set of results of the second service in the second space;

wherein in the requesting creation of the second space, the program instructions are further computer-executable to implement requesting creation of the second space for storage of the set of results of the second service.

15

32. The carrier medium of claim 23,

wherein in the accessing the first space, the program instructions are further computer-executable to implement accessing the first space at a first address to a storage facility;

20

wherein in the creating the second space, the program instructions are further computer-executable to implement creating a second address to the storage facility; and

25

wherein in the accessing the second space, the program instructions are further computer-executable to implement accessing the second space at the second address to the storage facility.

30 33. The carrier medium of claim 23,

wherein the functions of the first space comprise storing information in the first space and reading information from the first space; and

wherein the functions of the second space comprise storing information in the second space and reading information from the second space.

5

00000000000000000000000000000000